

Samuel Greenberg



**Total body strength
workout without a gym**



Samuel Greenberg



**Total body strength
workout without a gym**



Total body strength workout without a gym

**Samuel Greenberg
Text Copyright © 2020**

Warning the author is not responsible for any undesirable consequences in case of the use of medical products without consultation with the doctor. Every attempt was made to provide accurate data. All information provided in this book does not replace medical advice.

Disclaimer notice:

Please note information in this book for educational purpose only.

Every attempt has been made to providing accurate and complete information. Readers recognize that creator is not participating in rendering legitimate, money related or proficient guidance.

By reading this book reader agrees that under no circumstances are the author is not responsible of direct or indirect loses as a result of using information in this book including - but not limited - any possible errors, omissions and inaccuracies.

Annotation

If you want to have a strong and beautiful body, but you do not have the ability or desire to go to the gym, then this book will be your best assistant in building your ideal body. It details nutrition, daily regimen and, of course, training programs that will lead you to your goal. This book explains in simple language most of the nuances of training at home or outdoors using a horizontal bar, parallel bars, gender and your body weight. You will also find exercises for all muscle groups here and learn how to create your own exercise and nutrition plans. If there are medical contraindications, specialist advice is required.

This book is dedicated to those people who have no experience in strength training with their own weight, but really want to start training. The motives for starting classes can be very different: you may have seen a beautiful muscular figure on TV, and you also decided to shape your body. Maybe you have decided that you lack physical strength. Or maybe you wanted to impress other people by building yourself a muscular figure. The reasons don't matter. The techniques described in this book are designed for people of all ages, builds and fitness levels. Everyone can find something of their own in it, even if you already have experience of training in any kind of sport. If you are no longer a beginner, then this book will also help you expand your knowledge of practice and learn something new for yourself. You will learn to set goals and achieve them, moreover, achieve them quickly.

Table of contents:

[Chapter 1. Introduction](#)

[Chapter 2. Why exercise is easier than you think](#)

[Basic principles of a healthy lifestyle](#)

[Defining a training target](#)

[What you need to know](#)

[Chapter 3. Sport equipment and training organization](#)

[What to bring for training](#)

[Primary training](#)

[Chapter 4. How to eat properly for exercise](#)

[Ten nutrition rules for effective workout](#)

[How to eat to gain muscle mass](#)

[How to eat to lose weight](#)

[How much water to drink?](#)

[Nutrition and natural stimulators](#)

[Amino acids](#)

[Chapter 5. Daily regime for best results](#)

[When to sleep and exercise?](#)

[The importance of rest for muscle recovery.](#)

[Movement is life!](#)

[Chapter 6. How to create your workout plan](#)

[How often and how long should you train?](#)

[What muscle groups to work out in training?](#)

[How to build big muscles](#)

[How to get stronger](#)

[Chapter 7. Exercises for pectoral muscles](#)

[Push-ups exercises](#)

[1. Push-ups with wide set arms](#)

2. Push-ups with medium set arms
3. Push-ups with narrow set arms
4. Push-ups with hands at the head
5. Push-ups with hands at the hips
6. Push-ups on three points
7. Diamond push-ups
8. Push-ups with legs on the support
9. Push-ups with hands on the support
10. Push-ups-triangle

Chapter 8. Exercises for back muscles

Pull-ups on the horizontal bar

1. Wide grip pull-ups
2. Pull-ups with straight narrow grip
3. Pull-ups with a side grip on the handle
4. Pull-ups with reverse grip with deflection in the back
5. Pull-ups with a narrow reverse grip
6. Pull-ups with a different grip
7. Oblique pull-ups
8. Pull-ups with a rope thrown over the bar
9. Pulls upside-down
10. Australian low bar pull-ups

Chapter 9. Deltoid and trapezius back muscles

Handstand push-ups

1. Handstand push-ups
2. Push-ups in a handstand with a narrow setting of hands
3. Uneven handstand push-ups
4. Push-ups in a stand on one hand with support of balance with the other hand
5. Push-ups with hands at the belt for the deltoid muscles

6. Push-ups with angle

7. Push-ups with angle with legs on uplift support

8. Push-ups from the bench behind the head

9. Push-ups head down with the leg raised

10. Vertical push-ups

Chapter 10. Triceps

Triceps push-ups exercises

1. Reverse triceps push-ups

2. Narrow grip triceps push-ups

3. Triceps push-ups with French set hands

4. Diamond triceps push-ups

5. Push-ups for triceps with the arm extended to the side

6. Push-ups with a narrow setting of the palms turned towards you

7. Concentrated push-ups with raised legs

8. Concentrated push-ups with raised arms

9. Concentrated push-ups from the floor

10. Close-grip parallel bar push-ups

Chapter 11. Biceps

Biceps pull-ups

1. Pull-ups in reverse grip with amplitude up to angle of 90°

2. Pull-ups to one hand

3. Bending hands in reverse grip when hanging on the bar

4. Pull-ups on the handle with a torso turn

5. Pull-ups on one hand with a reverse grip

6. Bending hands on the bar with a straight grip

7. Pull-ups with one arm while standing on the ground

8. Side grip bicep pulls using bar handles

9. Pulling the body under a narrow grip

10. Accentuated arm flexion

Chapter 12. Forearms

Hanging on the crossbar

Holding weights

1. Hanging on the bar with a straight grip
2. Hanging on the bar with a reverse grip
3. Hanging on the handle with a side grip
4. Hanging on the bar on one hand
5. Hanging on a rope thrown over the crossbar
6. Holding weights in the hands
7. Holding the weights with the fingers
8. Unbending of the hands on a low bar
9. Compression of the wrist expander
10. Push-ups on fingers

Chapter 13. Legs

Squats

1. Deep squats on two legs
2. Squats on two legs in a wide stance
3. Plie squats
4. Partial squats
5. Squats with using a chair
6. Squats with heels off the floor
7. Bulgarian split squat
8. Sissy squats
9. Sumo-style squats
10. Squat on one leg "pistol"

Chapter 14. Calf muscles

Calf raises

1. Rising on socks on two legs with the socks away from you
2. Rising on socks on two legs with the socks towards you

- [3. Rising on straight socks](#)
- [4. Rising on socks from the platform](#)
- [5. One toe rise](#)
- [6. One toe rise on the platform](#)
- [7. Rising on socks in tilt position on the platform](#)
- [8. Walking on toes](#)
- [9. Rising on heels](#)
- [10. Rising on socks from a sitting position](#)

[Chapter 15. Lower back muscles](#)

[Basic exercises for lumbar extensor muscles](#)

- [1. Hyperextension lying on the floor](#)
- [2. Hyperextension from a support](#)
- [3. Hyperextension with body rotation](#)
- [4. "Superman"](#)
- [5. Hyperextensions from the "Romanian chair"](#)
- [6. Raising the pelvis lying on your back](#)
- [7. Raising the pelvis with shoulders lying on the platform](#)
- [8. Raising the pelvis from the reverse plank](#)
- [9. Raising straight arms to the side in lying position](#)
- [10. Forward bends](#)

[Chapter 16. Abdominal muscles](#)

[Crunches](#)

- [1. Crunches on the floor](#)
- [2. Sideways crunches](#)
- [3. Crunches with hands in the lock on the chest](#)
- [4. Crunches with hands on the floor](#)
- [5. Crunches with body rotation](#)
- [6. Side crunches](#)
- [7. Cross crunches to the opposite leg](#)

[8. Crunches with straightened arms](#)

[9. Folding](#)

[10. Crunches with weights in the raised up hands](#)

[Conclusion](#)

[About Author](#)

Chapter 1. Introduction

The most basic and important thing you need in your training development is a great desire to become better. Apart from this, in fact, nothing else is needed. After all, if there is a desire, then there will be a place for training, as well as the time and motivation to follow the daily routine and eat right. But in order not to burn out and not quit training, you need to rebuild your brain a little. If you force yourself to go to training, then in the long run this desire will be doomed to failure, because in the evenings you will allow yourself to eat unhealthy food, and during workouts you will exercise one way or another, and not as required, and watch all the time on the clock - when it all ends. Let's be realistic: you can't be an athlete in a month or two. The year may not be enough. Therefore, you need to prepare for long-term fruitful work.

The mood for training must be very strong; you must become a real fanatic. During training you must not force yourself to do something, a real flame must blaze inside you - you must wait for this training! During the exercise, you should concentrate exclusively on your feelings, and not on the environment. The desire to be the best should be born inside you, you have to dream about training, and in your dreams you have to present yourself as the most muscular and strong.

However, such a state of mind cannot be achieved if you watch a couple of motivational videos with athletes or street workouters. Here you have to work a little with your brains. You must begin to carry this idea of physical development within yourself, just as a person nurtures a plan for revenge - this desire must fill you to the brim and completely capture you, only in this case your strong wish will last for a long time. Time will pass and without training you will feel weak and worthless, and if you skip a training session, you will feel uncomfortable. Only with this approach everything will be fine. In the training itself, you will have to increase the load gradually - this is especially important in the early stages of training. You should not run in front of the locomotive. It is important to remember that

building muscle and strength is a long-term process and cannot be done overnight.

As you get bigger, leaner and stronger, you will need additional weights to further progress in your workouts. Over time, the moment will come when one horizontal bar and the bars will not be enough to progress further. However, I want to note that I have foreseen this, and you can train according to my scheme without spending money on any additional equipment, here it is solely a matter of your personal convenience. Accessories such as a training vest or leg weights can be replaced with a regular backpack with bottles filled with sand or water inside. The only limitation is your flight of imagination. Also, I want to show you the benefits of home or outdoor weight training versus resistance training in gyms:

Benefit 1: You save money on gym membership.

Benefit 2: You save time traveling to and from the gym.

Benefit 3: You choose the time and place of training yourself.

Benefit 4: You won't run into queues for the sport equipment.

Benefit 5: You have fewer distractions.

Benefit 6: You will learn to understand and feel your body.

Benefit 7: You will significantly improve coordination and functionality.

Benefit 8: The likelihood of injury during bodyweight training is significant decreases.

Benefit 9: You will avoid unwanted people and obsessive trainers.

So, to summarize, we can say that the most necessary component to start training, is a strong desire to become an improved version of yourself. If you have no desire or discipline is not firm, then even the best trainers and the most equipped gyms will not help you. Start building yourself, be disciplined and the results will not be long in coming.

Chapter 2. Why exercise is easier than you think

Most people who do not go in for sports believe that training is difficult and expensive, that you need to limit yourself in food and generally "live" like an abnormal person". In fact, such statements are made not only because of incompetence and ignorance, but also partly because of envy of those people who have reached success in building a beautiful and strong body. Fortunately, in order to start training, nothing needs to be radically changed; moreover, at the first stages it is undesirable. It takes a little time for the body to rebuild. He is already experiencing a state of stress, so you do not need to immediately rigidly limit him in something.

The first month of training, when you are still getting adapted to the process, you should not radically change your diet. It will be enough to start from small changes, for example, give up alcohol and too sweet or fatty foods. Over time, as you get used to the new regimen, you yourself will want to exercise and eat right. The realization will come to you that you did not understand how you lived without all this before, and you will only regret that you did not start training six months or a year ago.

Basic principles of a healthy lifestyle

So, in order to come to your ideal figure and become much stronger, you need to understand that, directly, the training itself is far from all that you need to achieve a result. Equally important are proper nutrition and adequate sleep. If you present these three components in proportion according to their importance, then, in my opinion, it will look something like this:

1 st place: training (40%);

2nd place: food (40%);

3rd place: sleep and rest (20%).

If something falls out of this, then you can forget about your physical development. Without a well-structured diet, all of your workouts will

go to waste, as your body will either not recover or become overgrown with a layer of fat, depending on whether you are undernourished or over-eating. Without regular training, the body won't get the stimulation it needs, and gains in strength or muscle mass simply won't come from. You should not forget about rest and enough sleep, because without enough sleep and rest in your life, you will not be able to recover normally and you drive yourself into a state where the body will not be able to train at all and adequately respond to stress. Now you need to fulfill the most important thing - to set the necessary goal and follow it.

Defining a training target

As an initial step you have to define the target of your workout, in light of the fact that it is the most significant step in building workout timetable and diet. After all, the goals "to become the most muscular in the suburb" or "to be just embossed and lean" are radically different.

It is impossible to exercise and eat in a way that simultaneously shed fat, build muscle, and progress in strength and endurance. This is very important to understand, so that in the future you do not have the wrong idea of how to achieve the ideal figure. You can't do everything at once, just one task at a time. If you are working on getting stronger, then it is very difficult to work on endurance at the same time, as these are completely different types of training.

Of course, it is possible to combine such diverse workouts up to a certain point, but then it will be necessary to make a choice in favor of one thing, since the second goal will interfere with your approach to the first and vice versa. The same is with the body shape. It is extremely difficult to simultaneously build muscle and burn fat. More precisely, to be honest, it is possible, but only in the first stages of training and for an extremely short time. The thing is, when you are working on increasing muscle mass (trying "pump up"), then you have to eat hard in order to create a supply of calories, from which then muscles will grow. But our body is created for survival; therefore, in parallel with the muscles, it will also store a certain amount of adipose tissue. This will happen in any case, it is almost impossible to gain pure muscle tissue, no matter how ideally your training program and diet are built.

The opposite situation occurs with fat removal. Even if you do everything correctly, the body will burn some of the muscles along with fat deposits. When you get rid of fat, you create a calorie deficit, and since the human body is extremely reluctant to part with fat for the simple reason that it is a supply of energy in case of hunger (our body is created for survival, remember this), the body will burn muscle mass easier than fatty one. That is why it is impossible to simultaneously burn fat and build muscle mass, since these are two

opposite tasks, for each of which you need to choose your own diet. Now you need to decide on the goal.

How to create that perfect figure? If my goal, for example, is to build more lean muscles, then in practice it will look like this:

1. Let's say my body weight is 70 kg.
2. I devoted 9-11 months a year to gaining muscle mass. I managed to gain 12 kg during this period. Now my weight is 82 kg.
3. For 2-3 months I was engaged in the removal of excess fat, which I gained along with the muscles. I managed to reduce my body weight to 75 kg.
4. Based on the results of this annual cycle, I gained 5 kg of lean muscle mass. I look much better now. Then this cycle is repeated.

If you are initially a fat person, then the stage of gaining muscle mass is not necessary for you - most likely, you already have enough muscles in your body. The problem is that your muscles are just hidden under a layer of fat. Here, it is best to start drying immediately. A scale and mirror will help you determine your training goal. Decide what you need to focus on right now - gaining muscle mass or get rid of excess fat from your body. There is no the third option here. How do you know if you need to lose fat, or you can immediately start "pumping muscles"? First you need to find out how much fat is actually in your body.

Measurements can be taken in the following way:

1. Waist to hip ratio method: measure and then divide the waist circumference by the hip circumference - the resulting ratio should not exceed 0.8. If the coefficient is greater than 0.8, then it is better to start "drying" or get rid of fat.
2. Method for measuring the skin fold on the abdomen: take a ruler in your right hand, then stand up and pinch the skin along with the fatty tissue slightly to the right of the navel, parallel to the right nipple, then measure the thickness of the resulting fold. Drying should be started if the obtained value is greater than or equal to the maximum allowable value in the following table:

Age	Maximum value (in mm)
18-22 years	20 mm
22-27 years old	21 mm
27-35 years old	23 mm
35-40 years old	24 mm
40-45 years old	26 mm
45-50 years old	27 mm
Over 50 years old	30 mm

So, where to start, with drying, or immediately with increase of muscle mass is more or less clear. How to train strength in parallel or develop general endurance? Let's figure it out. When you are working for strength, you, as well as when gaining muscle mass, require increased nutrition, therefore, in parallel with gaining muscle mass, you can also train strength. Let's say we set aside 2 months a year for strength training, somewhere in the middle of a muscle mass increase cycle. With regard to the development of endurance (by the word "endurance" I mean the general endurance of the body), then developing it while gaining muscle mass is quite problematic. Personally, I prefer to devote two to three weeks to endurance training every 3-4 months, so this does not particularly interfere with both gaining muscle mass and drying the body, and all these periods together can improve both the figure and endurance and strength in a year.

What you need to know

Here I want to tell you some facts about strength training that is confirmed both by scientific data and by the long-term practice of many professional athletes.

You can't get rid of fat and build muscle at the same time!

As I explained earlier, these are two opposite processes. Whether you gain muscle or burn fat depends on your diet, more precisely on the amount of carbohydrates you consume and a deficit or surplus of calories.

Muscle doesn't grow with training. They grow during rest after it!

During training, your muscles are damaged, but you should not be intimidated, as this is a normal and beneficial process. During rest, the muscles recover and adapt to this load, becoming larger and stronger. For this reason, you can progress in results, and for the same reason it is so important to get enough sleep and rest.

Gaining muscle mass will not make you clumsy!

The number of muscles in your body alone is not an obstacle to your flexibility and agility. But, if you focus your attention only on gaining muscle mass, forgetting about endurance training, about the development of flexibility and body speed - then yes, in this case, your large muscle mass will only interfere with you.

If you stop exercising, your muscles won't turn into fat!

This cannot happen for the reason that muscle and adipose tissue have a completely different structure and cannot "flow" into one another. You can only get fatty if you eat as hard as during the active training stage. With the cessation of training, you will also need to reduce the amount of food eaten, and the form that you gained during the time when you were actively exercising will remain with you for a long time.

We can't reshape muscles, but we can make them bigger!

The human body is so arranged that the shape of the muscles is genetically incorporated, and it is impossible to correct a curved

press or change the shape of the biceps. But on the other hand, you can increase the size of the muscles and, thus, improve your proportions, and refine the initially lagging muscle groups.

Chapter 3. Sport equipment and training organization

To start training, as I said earlier, you only need the floor, parallel bars and a horizontal bar. All of this can be found on almost any sports ground near your home. But if you decide that you will do it at home, then in addition to the horizontal bar and the bars, for which you will have to allocate part of the space in the room, there is another type of equally useful equipment that will improve the productivity of your workouts. It is not necessary to acquire all this at first, but in the future, with the growth of your fitness level, all this equipment will help you progress further:

1. The 3-in-1 horizontal bar is a prefabricated structure installed in a brick or concrete wall with anchor bolts and withstanding a load of 180-200 kilograms. Changing its position, such a structure is capable of being both a horizontal bar, and parallel bars, and a simulator for the abdominal muscles. It is not necessary to have a 3-in-1 horizontal bar ready for use, but such a simulator will allow you to train right at home.
2. Weights for body - essential to increase the load in your workouts if bodyweight exercises are too easy for you. The role of the simplest weighting agent can be an ordinary backpack with a load inside.
3. Weights for the legs - needed to increase the load while running and performing various exercises with body weight. In the absence of weights for the legs, they can be replaced with bottles filled with water and tied to your feet.
4. Abdominal roller is a highly effective core trainer that will help diversify your abs and lower back workouts. In its absence, you can use any object sliding on the floor on which you can put your hand.
5. Fitness rubber band - used as an alternative to various exercise equipment, as it is more comfortable. With it, you can adjust its resistance yourself by changing its stretch. This is a great thing to help complement your workouts and take them to the next level. In our training with you, it is not needed, and in this book we do not

consider it, however, a rubber band can act as an excellent sport gear of your training.

6. Carpal expander - designed to develop grip strength and forearm muscles by compressing it in the hand. You can replace it with a tennis ball or any other resilient object that you can squeeze in your hand.

7. Racks for push-ups - in addition to relieving the load on the wrists, racks for push-ups are designed to change the load vector of push-ups, increase the depth of push-ups, the ability to change the position of the hands, and also to make performing regular push-ups more comfortable. Some of the stops are height adjustable to help you adjust them to fit. You can replace them with some small items that will be convenient to put your hands on, for example, two stacks of books under each hand.

Also, to monitor the result, you will need:

1: Training Diary

2: Measuring tape

3: Electronic scales

Your training diary needs to display information about your training program in order to track your progress in training. It will also need to display data on changes in body weight, anthropometry and well-being. Your training diary should be done every day that you have a training session.

What to bring for training

Now, let's talk about what you need to take with you to training:

1. Gloves - so as not to rub calluses on your hands.
2. A bottle of drinking water with a volume of at least a liter - to replenish the water lost during training.
3. Athletic or dressing after workout - better immediately after workout change into dry clothes so as not to catch a cold.
4. Clock or stopwatch - to control the time pause between sets
5. Post-workout snack - in case you can't eat right after exercise, has meaning to take a snack with you.

I will also say about various gadgets, the purchase of which is also optional, but which can help to you in your training and calculation of physical activity during the day:

1. The heart rate monitor is an indispensable item for cardio training. It allows you to monitor the heart rate reductions.
2. Step monitor - to record the number of steps taken per workout, or for a certain period of time.
3. Blood pressure monitor - for monitoring blood pressure in relaxed condition, before, during and after training.
4. Distance counter - allows you to monitor the amount of distance covered during a workout or for a certain period of time.
5. The calorie counter is a handy thing for keeping track of the amount of nutrients eaten throughout the day.
6. Clock or stopwatch - to control the pause time between sets, and the total time spent on training.
7. Fitness apps - apps that help you find or create a workout program and keep a workout diary. Many of them are equipped with a timer.

Most of these features can be found in fitness bracelets, smartwatches, or smartphone apps. All this will allow you to control

the level of your physical activity much better, however, with the growth of your preparedness and fitness, all this will not be necessary, since over time you yourself will learn to control the state of your own body and know the dosage of the load you need.

Primary training

Before you start full-fledged bodyweight training, you will need to master a few basic exercises, on the basis of which your entire training system will be built. Moreover, no matter what goal you set for yourself, these exercises will become the cornerstone of your workouts. All these exercises are probably familiar to you from physical education lessons at school, and until you can do them a certain number of times, it will be pointless to start strength training. If you can't do them at all, then mastering them will be your first priority. So, below is a list of basic exercises that will be the basis for your training plan. To really start training, you need to do the following exercises a certain number of times:

An exercise and the required number of repetitions in one approach:

1. Push-ups in the lying position with any setting of the hands, minimum 10.
2. Pull-ups on the bar with any grip, minimum 6.
3. Raising the torso from a prone position in any style, minimum 15.
4. Squats on two legs in any style, minimum 20.
5. Hyperextension lying on the floor, minimum 12.

In addition, I recommend that you, in parallel with this, gradually start doing cardio workouts. It should be included in gradually. Go out to run for your own pleasure, without timing and result; go ice skating or rollerblading; arrange a bike ride if the weather permits. If you are a trained person and know how to do pull-ups / push-ups / squats dozens or hundreds of times, and running a few kilometers is not a problem for you, then you can skip this stage and immediately proceed directly to strength training.

Your initial warm-up should also include stretching and rotation exercises for all joints in your body. This will help you reduce the chances of injury while exercising. A set of stretching and rotating exercises can be easily found online.

Chapter 4. How to eat properly for exercise

All food products contain nutrients - substances that give energy. These include proteins, fats and carbohydrates.

Proteins are complex compounds made up of amino acids and are the carriers of life. One gram of protein carries four kilocalories. Proteins are the building blocks of muscles, so it is vital for a exercising person to consume them in large quantities. Moreover, no matter what your goal is - losing weight, gaining muscle mass or developing strength, the amount of protein consumed should remain within 1.5-2 grams per kg of your body weight. In addition to the fact that proteins act as a building material for your muscles, in the human body they also perform a protective, transport function. It's also important to know that proteins come in two flavors: fast and slow.

Fast proteins are absorbed by the body in a very short time. Therefore, it is advisable to use them before training, immediately after it, and also combine them with slow proteins during the day. Fast proteins are found in meat, eggs, fish, and dairy products. Slow proteins are absorbed by the body for several hours. They need to be consumed during the day, ideally before going to bed, or when you will not be able to eat for a long time, in order to ensure the process of protein intake into the body for a long time. Slow proteins are found in cottage cheese, mushrooms and soybeans.

Fats are water-insoluble substances. They carry out energy, protective, thermoregulatory functions. They are able to store energy for a much longer time than carbohydrates. But this energy is slow. One gram of fat carries 9 kilocalories. Fat should be consumed within 1 gram per kilogram of body weight. Fats should be consumed during breakfast, or during the first half of the day. It is best to avoid fats before exercising as they can cause drowsiness and a heavy stomach, which can adversely affect the intensity of your exercise.

Fats can be divided into saturated and unsaturated. Unsaturated fats are "good" fats for the body, as they contain omega-3 fatty acids that are beneficial to health. Unsaturated fats can be found in walnuts,

soybeans, oats, rapeseed, flaxseed, olive oils, and fish oil. Saturated fat contains vitamins A and D, but also contains bad cholesterol. They are very nutritious and should certainly be present in the diet; however, these fats should not be abundant. Saturated fats are found in meat, lard, and dairy products. The proportion of unsaturated and saturated fat in the human body should be 60/40 in favor of unsaturated fat.

Many sweets, chips, fast food, frozen convenience foods also contain fats, but these are so-called "trans fats" - unhealthy fats that should be avoided altogether.

Carbohydrates are primary source of energy for humans. By varying the amount of carbohydrates in our diet, we can control our physical fitness. If you eat about 5-6 grams of carbohydrates per kg of body weight, and at the same time, you exercise intensely, then you will gain muscle mass. If we limit our carbohydrate intake to 1-2 grams per kg of body weight, also not forgetting about exercise, then we will lose weight and burn fat. However, for each person, the amount of carbohydrates consumed will be different, depending on the goal you want to achieve, since each person's metabolism is different.

If a large amount carbohydrates is consumed that will be stored as fat. However, a lack of carbohydrates is also harmful to the body, since you will have no energy at all, severe fatigue will begin to appear, and blood sugar levels will decrease. It makes sense to consume all carbohydrates during the first half of the day. The fact is that by eating them shortly before going to bed, you will not have time to burn the energy obtained from carbohydrates, and it will remain with you in the form of subcutaneous fat.

Carbohydrates can be divided on simple and complex. The emphasis in nutrition should be on complex carbohydrates, since simple carbohydrates are likely to stay with you in the form of excess fat. Complex carbohydrates are found in all grains such as buckwheat, millet, as well as potatoes and rice. Derivatives of complex carbohydrates are: starch, fiber, cellulose and glycogen. Simple carbohydrates (in fact, regular sugar) are found in juices, fruits, and sweets. Derivatives of simple carbohydrates are sucrose, fructose, lactose, glucose and maltose.

To understand how much protein, fat or carbohydrates a particular product contains, just read its nutritional value on the label.

Ten nutrition rules for effective workout

So, in order to achieve the ideal physical shape for you (depending on your goal), you do not need to infringe on yourself in food and completely abandon your favorite foods. At the initial stage, it is enough to only slightly adjust your diet, the type and amount of food and water consumed, so that training really brings results. Remember these ten rules that will help you achieve results:

Rule 1 : no alcohol, drugs and cigarettes.

Alcohol blocks any progress in your workouts, as it dehydrates and destroys your body. It reduces protein synthesis, which is also responsible for muscle growth, reduces the level of the male hormone testosterone in the blood, replacing it with the female sex hormone estrogen, which turns you into a person with an effeminate figure, with a beer belly and a distribution of fat according to the female type.

Rule 2 : it's better to eat more often, but less

This rule will allow you to avoid excess fat deposits. When you divide your daily allowance into 5-7 meals, you will not only speed up your metabolism, but also increase the thermogenic effect of food intake, which will also prevent you from gaining excess weight. Also, you will not have energy failures, and you will always feel on an energy rise, and this method will also save your body from the need to throw out large doses of insulin after rare meals. Therefore, all professional bodybuilders and powerlifters eat at least 5 times a day. Gaps between meals should not be more than three hours, otherwise your body will start starving and "eat" its own muscles for energy, which we do not need at all, regardless of whether you dry out or build muscle mass.

Rule 3 : avoid foods high in carbohydrates and fats

Such food will inevitably be deposited in fat and your shape will deteriorate. It is not recommended to eat foods that combine a large amount of carbohydrates and fats at the same time.

Rule 4 : skip snacking at night

Such snacks will turn into a set of fat for you, since the body will not be able to burn excess calories for the reason that you will then go to bed and you will not have any physical activity. If you wake up in the middle of the night by the rumbling of your stomach, reminding you that it would be nice to have a snack, then this is a signal that you are either malnourished during the day or had your last meal long before you went to bed. The last meal is better to set an hour or two before going to bed.

Rule 5 : eat carbs in the morning

Carbohydrates carry energy that energizes your body. And if you gorge on carbohydrates in the afternoon, then with a high degree of probability you simply will not have time to burn them, and they will remain with you in the form of excess fat. But rearranging carbohydrate-rich foods for the first half of the day will give you energy for the whole day. The only exception to this rule is if you train late and need to eat a full meal after training. In this case, taking carbohydrates in the afternoon is justified.

Rule 6 : don't starve, never feel hungry

This rule always applies, regardless of whether you are gaining muscle mass, working for strength or on body shape. Do not allow the body to experience a strong feeling of hunger, as in this case, the so-called "catabolism" begins, and your muscles begin to slowly break down, as they lack nutrients and energy for other body tissues. Our body is programmed to survive, and if you starve, it will burn muscle, not fat, for fuel, since subcutaneous fat stores more energy than muscles.

If you feel hungry, then you are either eating little or taking long breaks between meals, which, of course, is wrong. Feelings of hunger can be constant if you're working on body shape improvement and on a low-carb diet, but even then, it should be light and not annoying, otherwise eat vegetables and non-nutritive foods to fight it off.

Rule 7 : make sure you eat on time and what you need

If you go to work or school and know that there you will not be able to buy something to eat, then it is better to take food with you to all day. It is best to pack in food containers, in this form it will not take up much space. You are building an ideal body for yourself and you should not have excuses not to follow the regime and eat incorrectly or out of time. If you are unable to sit down and eat, then you should take with you food that you can quickly eat or drink. For example, 500 grams of low-fat kefir contains approximately 15 grams of protein and 20 grams of carbohydrates, which is a good option for a snack. In general, in the case of a limited time, the best option is a protein shake that will supply your body with protein and nutrients, but remember that nothing can replace a full meal, so try to eat right and on time, even if you are not at home.

Rule 8 : it is almost impossible to simultaneously burn fat and gain muscle mass

This is due to the characteristics of the human body. To gain muscle mass, in addition to strength training, you need to get more calories from food than you expend in a day, by about 15-25%. To burn excess body fat, you need to get fewer calories than you expend in a day, by about the same 15-25%, creating them deficit. If your weight does not change, then you are using as many calories per day as you are gaining. From this we conclude that burning fat while gaining muscle mass is almost impossible, since it is impossible to simultaneously receive more and fewer calories than you consume in a day.

Rule 9 : eat immediately after training

In the first half hour after training, the so-called "protein-carbohydrate window" opens, when protein synthesis in the muscles increases dramatically. During this period, you need to eat something containing large amounts of proteins and carbohydrates. Carbohydrates will replenish energy expended in training, and proteins will act as building materials for your muscles.

Rule 10 : eat protein and carbs before workout

The pre-workout slow carbohydrates will provide you with the energy that will allow you to train with quality and full concentration. The

muscles will receive amino acids from protein, which will save them from breakdown during training.

To summarize, I must say that following these basic ten rules, you can get yourself in perfect shape; however, how long it takes depends on your current shape and willingness to strictly follow these rules.

How to eat to gain muscle mass

So, as we have already found out from the previous paragraph, it is proteins, fats and carbohydrates, or rather their amount and ratio in your daily diet, that determines your physical shape. To grow, you must eat more calories than you burn throughout the day. With intense strength training, the amount of protein consumed per day should be approximately 1.5 - 2 grams for every kilogram of body weight. If protein is not enough, then the body will have nowhere to take the building material for muscle growth. However, a large amount of protein is also harmful, as it harms the digestive system, but it will hardly be absorbed by your body. It will fit optimally in the interval of 1.5 - 2 grams of protein for every kilogram of body weight, that is, if you weigh 70 kilograms, then you should receive at least 105-140 grams of protein from the food consumed per day.

It's even easier with fats. The norm for the consumption of fat, I would call about 1 gram for every kilogram of body weight. This amount of fat is essential for maintaining your health.

The situation with carbohydrates is a little more complicated. It is difficult to say the exact amount for a set of lean muscle mass, since each person's metabolism is individual, and if your goal is precisely a set of lean muscles without fat, then I advise you to try the following method: try to consume 4 grams of carbs for two weeks for each kg of body weight (if you weigh, say, 80 kilograms, then eat 320 grams of carbohydrates per day, and mainly complex carbohydrates) and see how your weight and your physical form change.

There can be three options for the development of events:

Option 1: Nothing changes, you practically do not grow, you feel that you obviously lack energy, and, in your opinion, you are not recovering quickly enough, or you are losing weight altogether. In this case, increase the amount of carbohydrates consumed to 5 grams per kilogram of body weight, and repeat the experiment. If the situation does not change, then add other gram of carbohydrates for every kilogram of body weight until you start to grow (muscles).

Option 2: You see improvements for the better, you gain muscle mass, mood and well-being. This is what we wanted. In this case, leave everything as it is.

Option 3: You start to get fat. So 4 grams of carbohydrates for every kilogram of body weight per day is a lot for you. Most likely, either you initially tended to be overweight, or you do not move enough during the day. Cut the amount of carbohydrates consumed to 3 grams for every kilogram of body weight per day and see in which direction your shape changes.

Also, I ask you not to forget that you need to eat often and little by little, be sure to eat immediately after waking up in order to start the metabolism, eat an hour and a half before and immediately after training, as well as an hour before going to bed. Such nutrition will allow you not to feel hunger during the day and evenly nourish your training body. Also remember to drink enough water.

How to eat to lose weight

If for gaining muscle mass you created an excess of calories in your diet, then in order to lose excess weight, on the contrary, their deficit should be created. In other words, during the day you should burn more calories than you received from food. However, there are some nuances here, which we will talk about in this paragraph. If you simply cut your diet to a minimum, then muscles will be burned along with fat, and then, when you return to your usual diet, it is fat that will return in the first place, since the human body is aimed at survival, and in the first place will store exactly the fat mass. Accordingly, after leaving such a diet, after a while the fat will return, but the muscles will not. You will look, accordingly, even worse than before the diet, and you will also feel worse.

So how do you build your diet to burn exactly excess fat? My answer is that when you are engaged in fat burning, you must remember about one more goal - to preserve muscle mass. This is possible if you train as intensely as at the stage of gaining muscle mass, try to maintain your strength indicators, and naturally, do cardio loads, as they will speed up the process of fat burning, due to the fact that you will also expend calories during cardio workouts. In the diet, we will only regulate the amount of carbohydrates. If the level of consumed proteins and fats can be left alone, and leave everything as it is (1.5 - 2 grams of protein per kilogram of body weight, and up to 1 gram of fat per kilogram of body weight), then carbohydrates will have to be reduced to 1-2 grams for every kilogram of body weight. Thus, if you weigh 90 kilograms, then you will need to consume 90-180 grams of carbohydrates.

There are also three possible scenarios for the development of events:

Option 1: if you lose more than one kilogram in weight per week, then we can confidently say that you are also losing muscle tissue, and we do not need this at all. In this case, add 0.5 grams of carbohydrates for each kilogram of body weight and monitor the dynamics.

Option 2: if you are practically not losing weight, then reduce the amount of carbohydrates by 0.5 grams for each kilogram of body weight until the result appears.

Option 3: you lose 0.5 - 1 kg of body weight per week. This is your main task in drying - it strives to reduce the fat mass of the body by 0.5 - 1 kg per week. It should be borne in mind that in the first days or even weeks of your fat burning diet, you can lose a lot of weight due to water, some of which will leave you as soon as you decide to dry out.

Thus, to summarize, it should be said that the weight and your diet during drying must be monitored especially closely. Do not forget that it is undesirable to keep a fat-burning diet for more than two months (8 weeks), as the body adapts to such a diet, and over time the process of fat burning slows down. If you need to lose more than 10-15 kg, then there is also a trick here. After 8 weeks of drying, take a break and return to your usual diet for two to three weeks, and then start drying again for 8 weeks. Naturally, during such two to three week exits from drying and returning to their usual diet, part of the weight will return back, but only a part! Ideally, you should lose 8 kg for drying, then gain 2-3 kg during the break, and then again lose 8 kg during drying, and the process is repeated again. Gradualness and consistency are important here. Don't rush the results - they will definitely come if you do everything right. Adhering to this tactic, you will burn fat for a long time and get by with minimal loss of muscle mass. Do not forget that carbohydrates for drying (to get rid of fat) should be consumed in the first half of the day, and these should be exclusively complex carbohydrates. For optimal results, you will need to divide your entire daily diet into 6-7 meals; this will also be required so that you do not suffer from hunger.

How much water to drink?

The body of an adult is approximately 65% water. The loss of water by the body in large quantities is extremely undesirable, as it will lead to various disruptions in the work of its systems. If a person loses 1% of water, then he begins to feel thirsty. With a loss of 4-5%, a person experiences a headache, performance decreases by 30%. The loss of 20% of water or more leads to death.

An unequivocal answer to the question "how much to drink" cannot be given, since the rate of water consumption is individual for each person, and depends on factors such as weight, physical activity during the day, gender, age, and so on. Usually scientists refer to figure 1 liter of water for every 30 kg of body weight. However, it makes sense to adhere to the following rules for water consumption:

Rule 1 : you should never feel thirsty

Rule 2 : you must definitely drink during strength training, the feeling of thirst, as I said in the first paragraph, is unacceptable.

Rule 3 : during exercise, you should drink water equivalent to the weight loss after exercise

Rule 4 : Drink a little during the day.

Rule 5 : Consider the temperature regime: in very hot weather, water consumption will increase, so drink more water in the heat.

Rule 6 : in conditions of hard physical or mental work, drink more water.

Rule 7 : Lemonade, juices, cola and other sugary drinks are not drinks, they are foods made of simple carbohydrates. Discard them altogether.

Rule 8 : coffee and tea are not water. Rather, they are diuretics, and vice versa, remove water from the body. Drink them less often if possible.

Rule 9 : if you wake up at night, be sure to drink a glass of water, as the body continues to lose water at night.

Rule 10 : you should not drink water with food. It is much wiser and healthier to drink a glass of water 15 minutes before a meal.

Muscular activity always leads to dehydration of the body, so drinking during training is not only possible, but also necessary. Personally, during strength training, I drink about 750 grams of water per hour, for me this is the optimal amount of water, but there are a couple of other ways to count, exactly how much you need to drink.

The first method is to compare your weight before and after strength training. The weight lost after training is the missing water.

The second method is the first rule of water consumption that I highlighted in the list: "you should never feel thirsty." Drink water before each training. I also recommend drinking 400-500 ml of water before starting a workout to nourish your muscles and provide yourself with a "water cushion", and during exercise to replenish the water that leaves with sweat and breathing.

Nutrition and natural stimulators

And a few more words about nutrition. First of all, the body should receive a complete set of nutrients, including trace elements and vitamins. After the age of 40 -50, it is necessary to reduce the amount of proteins and fats, as well as consume less foods containing carbohydrates (the main suppliers of energy), preferring plant foods. In addition, it is important to remember that all products can be divided conditionally into “dead” and “living”. The first ones are chemically inert and require for the assimilation of large expenditures of the internal energy of the body. The second ones are chemically active, capable of transmitting maximum of their energy with minimal participation of enzymes.

Especially dangerous are excess fats of animal origin, as well as excess carbohydrates from starchy foods. As for nicotine, alcohol and narcotic substances, they are antibiological substances; their target becomes the central nervous system - the most responsible link of any living organism. As a result of regular “bombardment” of nerve cells with these substances, their irreversible decay begins, and then the loss of psychophysical health.

The stimulating effect on the increase in the volume of skeletal muscles is: dosed work - strength and running training.

Running training is extremely effective as an anabolic agent and can be a good addition to training of a purely power character. Athletic training can end with a run (if inside, at the spot), which reduces fatigue of the nervous system caused by strength training. The share of cross-country training is limited by the level of general fatigue, which can affect the basic training. Therefore, you need to find a reasonable combination of strength and cross-country workouts, carefully increasing the latter as you adapt to them.

Amino acids

When running, the sensitivity of cells to somatotropin and insulin increases. There is an increase in the release of gonadotropic, somatotropin; adrenaline, norepinephrine; easily digestible proteins - special sports proteins, fish, cottage cheese, soy; amino acids - the following amino acids possess anabolic activity - aspartate, arginine, ornithine, glycine, proline, serine, tyrosine, citrulline, taurine, valine, isoleucine, leucine, lysine, and tryptophan.

- Arginine causes the release of growth hormone, stimulates tissue regeneration, enhances spermatogenesis, and is part of bone and tendon cells.
- Aspartate is involved in the formation of ribonucleotides (RNA precursors), increases the level of cellular energy, helps protect the liver, and improves the excretion of excess ammonia.
- Glycine slows down the process of muscle degeneration, promotes the synthesis of DNA and RNA, is involved in the synthesis of creatine, and stimulates the secretion of growth hormone.
- Ornithine increases the secretion of growth hormone, increases the metabolism of excess fat. Its effect is enhanced in combination with arginine and L-carnitine.
- Proline is the main integral component of collagen, strengthens cartilage, articular joints, ligaments and heart muscle.
- Serine is involved in muscle growth, the biosynthesis of purine, pyrimidine, creatine.
- Tyrosine stimulates the synthesis of growth hormone.
- Citrulline helps to produce energy and restore the body after fatigue.
- Valine is necessary for normalization of muscle metabolism, tissue repair and maintenance of nitrogen balance in the body.
- Isoleucine accelerates the process of energy production, increases stamina and promotes the restoration of muscle tissue. Leucine has a similar effect.

- Lysine is involved in the production of hormones, enzymes, promotes the formation of collagen, and is necessary for the synthesis of albumin. It is an essential amino acid in the construction of proteins.
- Tryptophan is involved in the synthesis of albumin and globulins, accelerates the secretion of growth hormone. To stimulate protein metabolism, not individual amino acid preparations are more effective, but their combinations. Such combinations have biologically active additives produced by various companies.
- Calcium - in an easily digestible form (as a building material for bones, ligaments, muscles).
- Iron preparations - as a component of myoglobin, as a catalyst for many biochemical reactions, as an integral part of hemoglobin - an oxygen carrier. Anabolic and biologically active substances with anabolic properties: coenzymes, vitamins, and so on.

Note. In building your diet, gradualness is very important, since sudden changes in your diet are stress for the body and for the nervous system. If you put in tremendous effort to eat right, there is a great risk of burnout and breakdown. Therefore, here, as in training, we do everything carefully. For the first time, I recommend that you switch to the correct diet, depending on your goals, within 3-4 weeks. This smooth transition will allow you to avoid stress, and once you get used to such changes in your diet, in the future, with changes in the diet, the transition stage is no longer required.

Chapter 5. Daily regime for best results

If you have not previously taken your training seriously, then most likely your normal daily routine was completely wrong. You used your time unproductively, ate incorrectly and at the wrong time, broke loose and ate at night, slept as needed, had spree and ignored the correct rest regime. If you are now allowing yourself any of the above, then all this will only interfere with you and nullify all your efforts in training. Muscles grow and rest while sleeping or resting. Growth hormone is released during sleep, which helps them grow and repair. You get the energy and building blocks for muscle growth from the right food, in which proteins, fats, carbohydrates and vitamins are mixed in the right proportion. And if you eat the wrong food or lack of sleep, then you spend your time and efforts for nothing. It's just a matter of time.

When to sleep and exercise?

Sleep duration is an individual parameter for each person, therefore, to say that the more we sleep, the better, would also be wrong. One person may need more rest time than another, this may also depend on the amount of stress during the day, the quality of sleep itself, the time of going to bed, and many other parameters. If we take the average values, then on average it takes 8 hours to get enough sleep and recuperate the body, but if you are engaged in heavy mental or physical work, then the sleep duration should be even higher and can go up to 9 hours. Also, if you are doing strength training, it is very useful to sleep for an hour and a half in the afternoon in the afternoon, at about 3-4 pm. If there is such an opportunity, then the ideal in this case is the schedule of 8 hours of sleep at night and an hour and a half in the daytime, in this case you will have the maximum rest, and the daytime sleep will give you additional strength. If the circumstances are such that you will not be able to sleep a lot, I recommend going to bed as early as possible. The most valuable time for sleep is from ten in the evening until one

in the morning. Therefore, if possible, it is better to go to bed at 10-11 pm and not stay up late.

The importance of rest for muscle recovery

Too many people who have just started training believe that muscle grows at the moment when they train intensely. However, this statement is incorrect, moreover, as paradoxical as it may sound, during good strength training, muscles are partially destroyed! How does this happen, they ask, because we train so that our muscles grow and not break down? Let's figure it out. Any strength training leads to the fact that part of the muscle fibers to one degree or another will be damaged during training, but it is this factor, oddly enough, that stimulates the growth of muscle mass. So when do muscles grow? During the rest! Training serves only as a catalyst for further muscle growth, so it is undesirable to train the same muscle group too often - it will not rest and recover.

Perhaps the best solution would be to give the muscle group that has undergone training a rest equal to 3-7 days in time, so that the muscles have time to recover and rest, so that any training system is built in such a way that while one muscle group worked out the day before is resting, the other is subjected to stress ... In an ideal scenario, the resting muscle after training not only recovers, but also increases in volume and becomes slightly stronger. This is what we want to achieve from our training. As for the rest days, here it is necessary to make an adjustment for the intensity and duration of the load that was directed to this muscle during training. If you trained it properly, gave it your best, then you need to rest for about a week, which is why most of my training programs involve a full training of one muscle group once a week. This, in my opinion, is the best way to build muscle as quickly as possible. And, accordingly, if the load on a specific muscle group was small, then it will take less time to recover.

Recently, it is quite common to train several muscle groups in one day, repeated 3-4 times a week. Of course, the load on one muscle group in such a workout is small. In my opinion, such a circular training program is not as successful as a split program as I said previously. Our task with you is to train not more, but more correctly,

strictly follow the nutrition plan and get enough rest, and you are guaranteed to get the result you are striving for.

Movement is life!

Alas, modern life is arranged in such a way that we are increasingly in a sitting position, and sitting is an absolutely unnatural state of the human body. The spine is not adapted to sit in one place for a long time, and the cardiovascular system also suffers from this. However, there is a way out: if you have a sedentary job, or for some reason have to spend most of the day sitting on a chair, then I recommend that you spend the rest of your free time actively - go to a workout, jog or just take a walk for your pleasure. Do not forget to take breaks during prolonged sitting - at least once an hour, try to get up, stretch and walk down the hallway or stairs - this way, you will reduce the harm to the body from prolonged sitting in one place. Remember that the human body is created for constant movement, and the more you move during the day, the more chances you have to live a long and healthy life, and stay fit and energetic until old age.

By doing strength training at least three times a week, you can strengthen your cardiovascular system, better cope with stress, increase bone density, you will burn many more calories, even just being at rest, and significantly improve your shape, you will become stronger and more resilient. One need not even talk about improving sleep and mood - this is understandable. However, strength training isn't everything. Any physical activity helps people live and improve quality of life. A person has to move, the more the better.

Chapter 6. How to create your workout plan

How often and how long should you train?

This is the most basic question for all newbies. I recommend starting with programs that involve three workouts per week for about 40-45 minutes. Warm-up and cool-down times are not included in the training time. At the “beginner” level, the load should be no more than three hours a week, but remember that even with such a meager load, the first and second weeks should be preparational.

The first week of training, give yourself only a third of the planned load in the program, the second week half the load, and from the third week, do it fully. All this is necessary to get used to training and avoid severe muscle pain during the first two weeks of training. Try to train variably. Each workout should carry something new, even if you have been doing the same program for a long time. Change your grips, angles, and hand position from time to time. Increase the training load gradually, moving from light training programs to more complex programs. Do not forget to keep records in your training diary, and take measurements and weighing - this will help you monitor your progress in training.

At the very beginning of training, your main task is to pull in, the development of exercise technique and psychological addiction to training and a healthy lifestyle. As your training level increases, the level of load can be increased to five to six hours per week (not counting cardio training), which you break into 4-5 workouts per week.

What muscle groups to work out in training?

The first step is to start training with the most difficult basic exercises for the largest muscle groups. This rule always applies, regardless of what goal you are pursuing - to gain muscle mass, increase strength, or shape muscles. It makes sense to put small muscle groups after large ones also because during the training of large muscle groups,

a large release of hormones occurs, and small muscles simultaneously receive an incentive to growth.

Large muscle groups include: legs, back, pectoral muscles.

Small muscle groups include: deltoid muscles, biceps (including forearms), triceps, abs and shin.

The loin can be roughly referred to as the back, calves to the feet, forearms to biceps, trapezium - to the deltoid muscles.

How to build big muscles

If your training goal is to build muscle, then you should know that it is quite possible to achieve this, even without a gym. In this situation, you will have to be much stricter than guys who train in gyms, follow all the rules of nutrition and observe the daily routine. You have to be the perfect machine that goes all out in training, eats right, and recovers well. Only in this case will you achieve such a result that your muscles will begin to tear your clothes, since it will already be small for you. Here it should be said that you will not see such a form as that of performing bodybuilders. To do this, you will have to use steroids with a risk to your health, which I strongly do not recommend to you. In this section, I will tell you what rules to follow if your training goal is gaining muscle mass:

Rule 1 : Work 1-2 muscle groups in one workout in order to focus your attention on them as much as possible. There are muscle building workouts that involve the whole body in one workout, but to me personally, they seem less effective.

Rule 2 : Start your workout with a larger muscle group and with the hardest basic exercise for it. This is to ensure that small muscle groups are not pre-fatigued prior to training large muscle groups. So, for example, if you train the triceps in front of the pectoral muscles, then you will no longer be able to load the pectoral muscles so effectively, due to triceps fatigue.

Rule 3 : Change your training programs every three weeks. Or at least make changes to them, since the body adapts to the same load, therefore, the stimulus for muscle growth is reduced. I noticed the greatest progress in my training when I moved from one program to another, after that I began to make changes to my training program more often and noticed a much better result.

Rule 4 : A few short workouts will be more beneficial than one or two long ones.

Rule 5 : I recommend that you include at least one cardio workout per week in your schedule. This will help your heart stay toned during the muscle building phase.

Rule 6 : The load (or weight) that will lead you to muscle growth should be 65-80% of your one-time maximum.

With the help of this table you can calculate for yourself training load:

How many times can you train per week? How many exercises should you put in your workout? How many approaches should you put in an exercise? How many reps should I do?

Muscle group

Pectoral muscles

Times per week: 1 -3

Number of exercises: 3-5

Number of approaches: 3-7

Number of reps: 6-12

Back muscles

Times per week: 1 -2

Number of exercises: 3-4

Number of approaches: 3-5

Number of reps: 6-12

Deltoid muscles and trapezius

Times per week: 1 -3

Number of exercises: 3-5

Number of approaches: 2-4

Number of reps: 6-15

Triceps

Times per week: 1 -4

Number of exercises: 1 -3

Number of approaches: 3-4

Number of reps: 6-15

Biceps

Times per week: 1-4

Number of exercises: 1-3

Number of approaches: 3-4

Number of reps: 6-15

Forearms

Times per week: 1-3

Number of exercises: 1-3

Number of approaches: 3-4

Number of reps: 6-20

Thigh muscles

Times per week: 1-2

Number of exercises: 3-4

Number of approaches: 3-5

Number of reps: 8-20

Calf muscles

Times per week: 1-3

Number of exercises: 1-3

Number of approaches: 3-5

Number of reps: 8-20

Small of the back

Times per week: 1-3

Number of exercises: 1-3

Number of approaches: 3-5

Number of reps: 8-20

Abdominal muscles

Times per week: 1-5

Number of exercises: 1-4

Number of approaches: 3-4

Number of reps: 8-20

How to get stronger

In order to develop strength, while using a horizontal bar, floor, uneven bars and improvised means - you need a desire and a little ingenuity. In our workouts with you, there are no heavy dumbbells and barbells. All we will be doing is the simplest loads. For example, a fifteen-liter bottle from under the cooler, taken between your legs during pull-ups, or the same backpack, filled to capacity with bottles of sand. I'm not talking about weights for the body and legs - if they are not there, then they can be replaced, but if they are, this will greatly facilitate your task and increase the comfort of your training. If you are skeptical about the development of strength according to my method, then I hasten to please you - if you devote at least a year to the development of your strength, then you are guaranteed to become stronger than 75-80% of people who surround you. Strength training will also allow you to increase the working weight in exercises, for the development of muscle mass, and after all, as we already know, it is the increase in working weights or load in exercises for the development of muscle mass that is the impetus for its development. So, first of all, if your goal is to improve your strength indicators, then in training you must adhere to several rules:

Rule 1 : You should use those exercises that involve the whole body or as many muscle groups as possible. Basic exercises such as squats, pull-ups, or push-ups use multiple muscles to work in concert and build strength.

Rule 2 : Strength training can involve multiple exercises for different body parts. It is permissible to work out the whole body in one workout.

Rule 3 : The weights of the weights must be constantly increased. With each workout, increase the load or working weight in the exercise by at least 1%.

Rule 4 : The number of workouts per week for strength work should be three, while each muscle group can be involved in work twice a week, that is, it has to be involved in two out of three workouts per week. For example, push-ups that involve the pectoral muscles in

the weekly plan can be at workouts # 1 and # 2, at workouts # 1 and # 3, or at workouts # 2 and # 3.

Rule 5 : I recommend including at least one cardio workout per week, even if your goal is to build strength. This workout should be done on a rest day, and should be short but intense.

Rule 6 : The load (or weight) in strength training should be 85-100% of the one-rep maximum.

Below I have given a table that provides information on what load should be given to a specific muscle group in order to make it stronger. Using this table, you can calculate your training load yourself:

How many times can you train per week? How many exercises should you put in your workout? How many sets should you put in an exercise? How many reps should I do?

Muscle group

Pectoral muscles

Times per week: 1-2

Number of exercises: 1-2

Number of approaches: 3-5

Number of reps: 1-5

Back muscles

Times per week: 1-2

Number of exercises: 1-2

Number of approaches: 3-5

Number of reps: 1-6

Deltoid muscles and trapezius

Times per week: 1

Number of exercises: 1-2

Number of approaches: 3-5

Number of reps: 1-8

Triceps

Times per week: 1

Number of exercises: 1

Number of approaches: 3-5

Number of reps: 3-8

Biceps

Times per week: 1

Number of exercises: 1

Number of approaches: 3-5

Number of reps: 3-8

Forearms

Times per week: 1

Number of exercises: 1

Number of approaches: 3-5

Number of reps: 3-8

Thigh muscles

Times per week: 1-2

Number of exercises: 1-2

Number of approaches: 3-5

Number of reps: 1-8

Calf muscles

Times per week: 1-2

Number of exercises: 1-2

Number of approaches: 3-5

Number of reps: 3-8

Small of the back

Times per week: 1

Number of exercises: 1

Number of approaches: 3-5

Number of reps: 5-8

Abdominal muscles

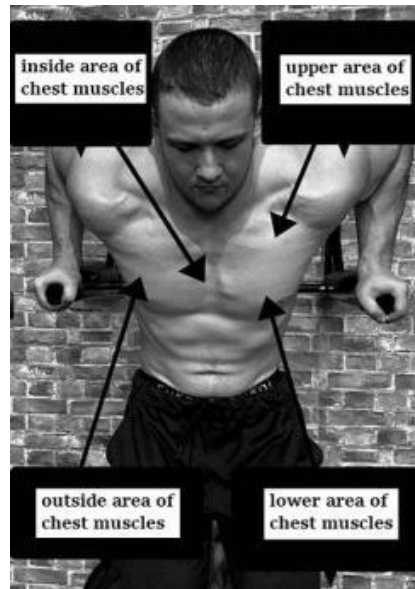
Times per week: 1

Number of exercises: 1

Number of approaches: 3-5

Number of reps: 5-8

Chapter 7. Exercises for pectoral muscles



The pectoral muscles are located on the front of the chest and consist of the pectoralis major muscle and the pectoralis minor underlying it. They occupy a fairly large area and are fan-shaped and serve for flexion, pronation and moving the shoulder. Also they are involved in bending the arms. When talking about training the pectoral muscles, they are often subdivided into four areas to work out: the upper outside, the upper inside, the lower outside, and the lower inside. Of course, this division is conditional, since any exercise that involves the pectoral muscles, one way or another, loads them completely.

Let's take a simple push-up as an example. If we throw our legs on a dais, then we will shift the load on the upper part of the pectoral muscles, and the higher we place our legs in push-ups, the more the upper part will be loaded. Accordingly, if you put your arms, and not your legs, on an elevation, then we will shift the load to the lower sections of the pectoral muscles. To work out the outside of the pectoral muscles, it is necessary to apply a wide range of arms in push-ups. In this case, those areas of the pectoral muscles that are closer to their outer edge, next to the shoulder, will be loaded. If you want to focus your attention on the inside of the pectoral muscles,

then use a narrow stance when performing push-ups. But it should be remembered that when push-ups with a narrow setting of the arms, the triceps are also loaded. These rules apply not only to push-ups, but also to any other exercises, both with body weight and with weights.

Push-ups exercises

Push-ups are a basic exercise, which is lowering and raising the body with the help of flexion of the arms, performed in a lying position, or in a lying position with raising the legs or arms on a dais. There are many variations of this exercise that allow you to more clearly distribute the load on specific muscle groups and their zones. Push-ups are the main exercise for working out the muscles of the shoulder girdle. The main load is taken by the pectoral muscles, triceps and deltoid muscles.

Technique of execution: starting position is lying down position with arms apart at the width required for push-ups. Pelvis is at body level. The direction of the palms and fingers is parallel to the body. Bend your elbows to the sides and lower yourself down until your chest touches the floor. After completion, straighten your arms and return to the starting position. Required equipment for basic exercises is floor and support gear for hangs and legs (see on photos). All exercises are suitable for beginners and more experienced people. The level of difficulty is basic.

1. Push-ups with wide set arms



2. Push-ups with medium set arms



3. Push-ups with narrow set arms



4. Push-ups with hands at the head



5. Push-ups with hands at the hips



6. Push-ups on three points



Note: your legs and arms should be on the platform, and you should be able to lower your chest as low as possible to stretch the pectoral muscles at the lowest point of amplitude.

7. Diamond push-ups



Note: thumbs should be almost touching each other.

8. Push-ups with legs on the support



9. Push-ups with hands on the support



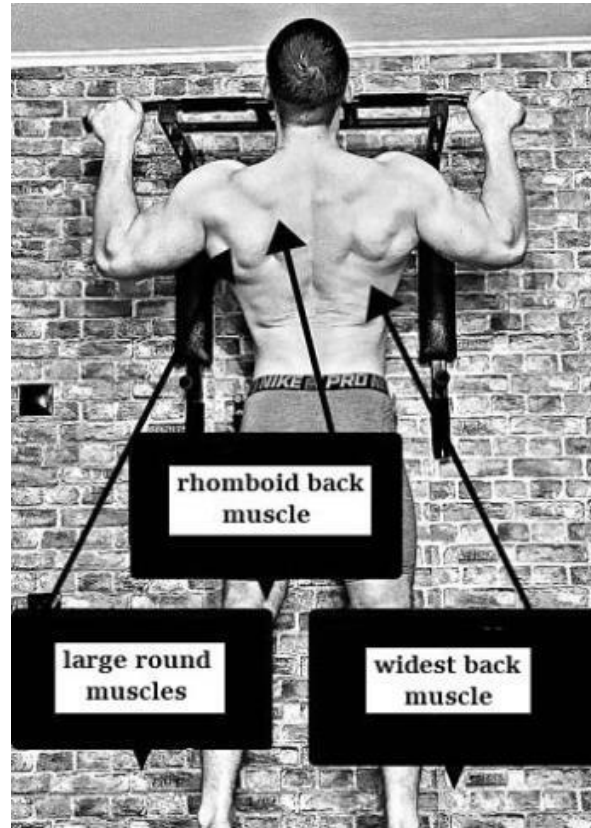
Note: any fixed objects can act as a support, on which hands can be placed so that they are at the same level.

10. Push-ups-triangle



Note: thumbs and forefingers should form a triangle.

Chapter 8. Exercises for back muscles



A large number of muscles are located on the back, each of which has its own structure and function. Let's list the main muscles of the back, excluding the muscles of the lower back and trapezius muscles - we will talk about them later.

The widest back muscles are involved in the movement of the shoulder blades, and are responsible for extension, adduction and abduction of the arm in the shoulder joint. Rhomboid muscles are located from the spine to the shoulder blades and responsible for the flattening and lowering of the shoulder blades. The large round muscles are responsible for extension, rotation and adduction of the shoulder joint. I will not list the rest, smaller muscles.

I will just say that most of the above muscles work together, and training your back is not as difficult as it might seem at first glance. The main exercise for working out the muscles of the back can be

called pull-ups with complete confidence. Different variations of pull-ups transfer the load to one or another area of the back, thereby ensuring its full study. When training the back, it is very important to work it out, giving the load both in the vertical plane (with the arms raised up) and in the horizontal (when the arms, extended and bent at the elbow joint, move perpendicular to the plane of the body). Regular wide-grip pull-ups are a typical vertical dorsal exercise. However, pull-ups with a reverse grip with the back bent back to the chest will already be considered an exercise that works out the muscles of the back in the horizontal plane.

Pull-ups on the horizontal bar

The pull-up is a basic upper body exercise that involves raising and lowering the body using the arms while hanging on a horizontal bar. There are many types of pull-ups that can make this exercise easier or harder and shift the load to other muscle groups. This is accomplished by changing the grip or varying the pull-ups. The main load in this exercise falls on the back muscles, biceps, forearms, trapezius muscles, abdominal muscles and pectoral muscles.

Technique of execution: starting position is a hanging on a fixed bar with straightened arms.

1. Bend your elbows and pull yourself up to the bar.
2. Gently lower yourself and return to the starting position.

Recommendation: pull up until your chin is above the bar. Do not swing or push your legs in the starting position to help yourself pull up - this makes it easier for the pulling muscles to work and you will not get the desired effect from the pull-ups. Required equipment for basic exercises is crossbar (see on photos). All exercises are suitable for beginners and more experienced people. The level of difficulty is basic. Required equipment – the horizontal bar.

1. Wide grip pull-ups



2. Pull-ups with straight narrow grip



3. Pull-ups with a side grip on the handle



4. Pull-ups with reverse grip with deflection in the back



Note: bend as much as possible in the lower back, tilting the body back.

5. Pull-ups with a narrow reverse grip



6. Pull-ups with a different grip



Note: after completing exercise, change hands.

7. Oblique pull-ups



8. Pull-ups with a rope thrown over the bar



Note: a towel can be used instead of a rope.

9. Pulls upside-down



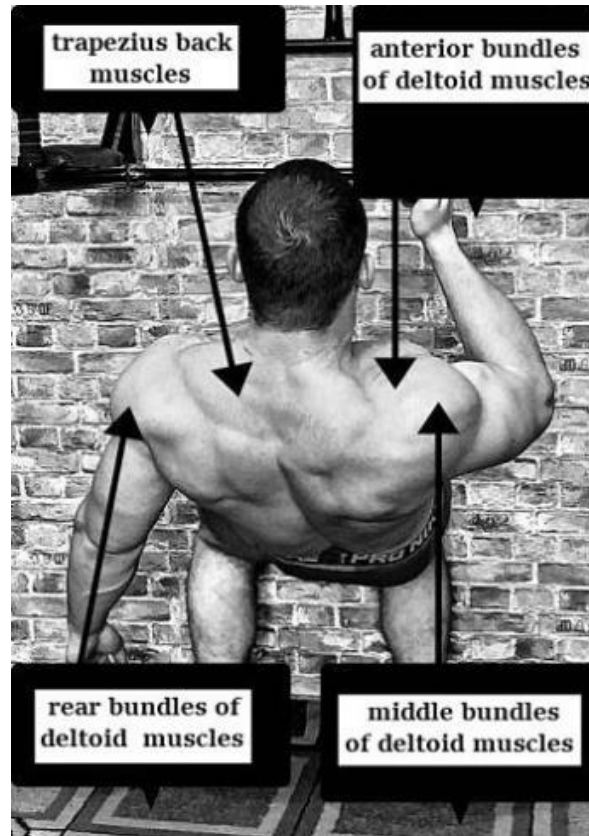
Note: legs and toes should point straight up during this exercise.

10. Australian low bar pull-ups



Note: you need to straighten and stretch your legs. Focus on your back muscles.

Chapter 9. Deltoid and trapezius back muscles



In this book, when I talk about the muscles of the shoulders, I mean primarily the deltoid muscles. They can be divided into three bundles, each of which has its own function.

Front bundles of deltoid muscles - allow you to bring your arms forward and above your head. The middle bundles of the deltoid muscles are necessary for extending the arms to the sides. Rear bundles of deltoid muscles - pull back the arms raised to the sides.

Thus, we get three beams, each of which needs to be worked out. Using body weight, it is rather difficult to load each of the beams in isolation. However, it is possible to build strength and mass in the shoulders using a variety of basic exercises, as well as exercises that engage several bundles of deltoid muscles at the same time.

As for the trapezius muscles, which are located in the upper back, I recommend training them specifically with the shoulder muscles,

since the back is a fairly large muscle group, and it is not always possible to pay attention to the trapezius muscles, along with many back muscles. Therefore, I recommend putting the trapezius workout together with the deltoid muscles. Also, it should be said that some shoulder exercises also use the trapezius muscles. Trapezius muscles are located in the upper back. Raise and lower the shoulder blades, and also participate in head turns.

Handstand push-ups

The handstand push-up is a basic exercise that, in addition to developing the muscles of the shoulders and arms, also develops coordination and balance. This exercise consists of lowering and raising the body by bending the arms at the elbow joints, while being in a handstand against the wall. The wall acts as a support, it is permissible to rest against it with your heels a little if you feel that you are losing balance.

Technique of execution: starting position is handstand (the distance between the palms of the hands is slightly wider than the width of the shoulders, the distance of the hands from the wall is 15-20 cm), the legs are partially leaning against the wall.

1. Slowly bend your elbows, dropping down.
2. Extend your arms and return to the starting position.

Recommendations: it is best to take the starting position as follows - get on all fours with your back to the wall, then begin to "walk" on the wall with your feet until you take the starting position. During the exercise, it is forbidden to touch the floor with your head. If you are doing this exercise for the first time, do it at half the amplitude, and gradually increase it. When you feel that you need to increase the amplitude, then you can place your hands on small platforms so that your head can drop between them. Try to barely touch the wall with your heels, and do not rest on it. Required equipment is the floor and support gear for hands and legs.

1. Handstand push-ups



2. Push-ups in a handstand with a narrow setting of hands



3. Uneven handstand push-ups



Note: place one hand on a support and do push-ups on the other hand. Change hands after approach.

4. Push-ups in a stand on one hand with support of balance with the other hand



Note: this is essentially a one-arm push-up. The other hand only helps to maintain balance.

5. Push-ups with hands at the belt for the deltoid muscles



Note: focus on the deltoid muscles.

6. Push-ups with angle



7. Push-ups with angle with legs on uplift support



8. Push-ups from the bench behind the head



Note: focus on the deltoid muscles.

9. Push-ups head down with the leg raised

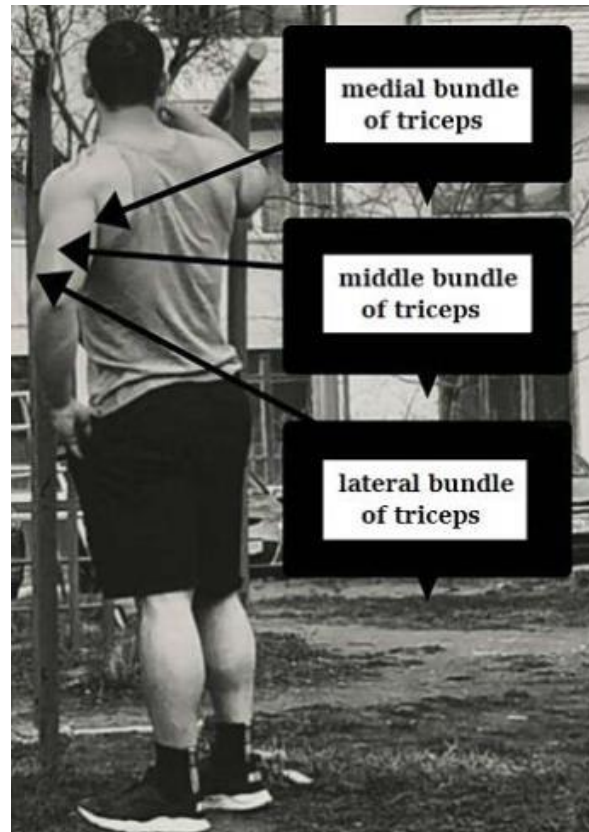


Note: After completing the approach, change the leg raised up.

10. Vertical push-ups



Chapter 10. Triceps



The function of the triceps is to extend the arm in the elbow joint. This muscle consists of three bundles - medial, long and lateral. They all attach to different points and share a common junction. To work out all of them, it will be enough to train the triceps in the most diverse way - experiment with the width of the arms, with the degree of rotation of the hands, etc. There are not so many specially selected exercises for triceps with body weight, so the main exercise for triceps will be all the same push-ups in different variations. Even simple push-ups from the floor or on the uneven bars will help build large triceps by pressing your elbows as close to the body as possible, rather than pulling them to the side - in this case, a significant part of the load will go to the pectoral muscles.

Triceps push-ups exercises

There are two basic types of exercises for triceps: direct push-ups and reverse push-ups. Let's take a quick look at them, because all subsequent exercises will be based on them.

Direct push-ups

Triceps push-ups are a basic exercise that, in addition to the triceps themselves, also involves the pectoral muscles and the muscles of the shoulder girdle. Any push-ups can be modified to work out the triceps, if during their execution you press your elbows against the body and bend them not to the sides, as is the case with training the pectoral muscles, but back.

Technique of execution: starting position is support on hands in lying position, the pelvis is level, the bodies of the arms are set apart at the width required for push-ups and the elbows look back.

The direction of the palms and fingers is parallel to the body.

1. Bend your arms at the elbows and lower yourself down until your chest touches the floor.
2. Straighten your arms and return to the starting position.

Recommendations: do not snap your elbows all the way back to the starting position, and make small stops at the extreme points of the exercise to avoid inertia and then raise to the starting position twice as fast as lowering.

Reverse push-ups

Reverse triceps push-ups are a basic exercise, which is a push-up with the hands behind the back in an emphasis on a fixed platform, while the legs remain on the floor or are also on the platform.

Technique of execution: starting position is support on hands from behind on the platform, arms shoulder-width apart, forearms perpendicular to the floor, fingers look forward. Legs are on the floor or platform and slightly bent at the knees.

1. Go down, bending your elbows.

2. Return to starting position.

Recommendations: body jerking, cheating and swinging are prohibited. You need to focus exclusively on the triceps. Required equipment is floor and support gear for arms.

1. Reverse triceps push-ups



2. Narrow grip triceps push-ups



3. Triceps push-ups with French set hands



4. Diamond triceps push-ups



5. Push-ups for triceps with the arm extended to the side



Note: the arm extended to the side serves only to maintain balance.

6. Push-ups with a narrow setting of the palms turned towards you



7. Concentrated push-ups with raised legs



8. Concentrated push-ups with raised arms



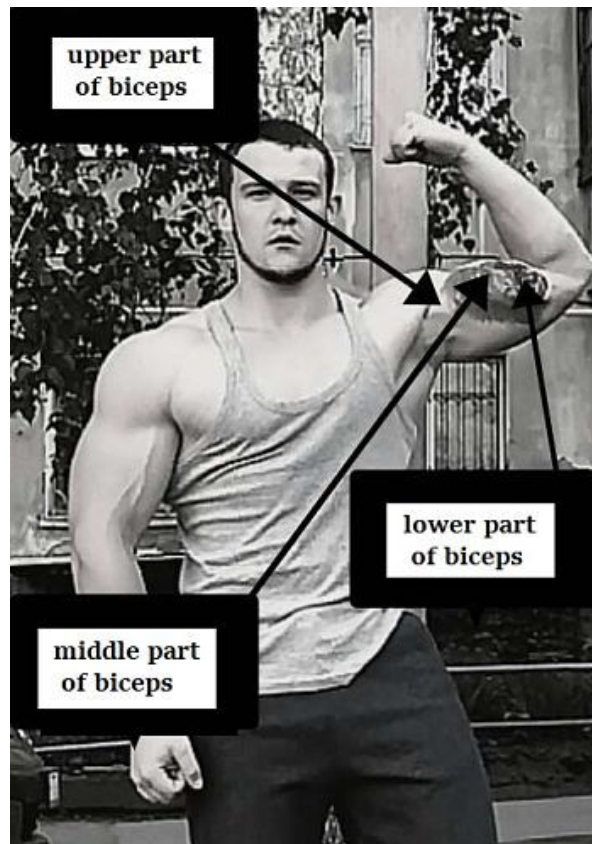
9. Concentrated push-ups from the floor



10. Close-grip parallel bar push-ups



Chapter 11. Biceps



The function of the biceps is to flex the arm at the elbow joint. Also, the biceps is partially involved in the turns of the forearm. This muscle consists of two bundles, but there are no exercises that involve any one particular bundle. Therefore, it would be more logical to conditionally divide the biceps into three parts: the upper part, the middle part and the lower part, closest to the elbow joint. The more the exercise forces us to move the bent arm at the elbow back, the more the upper part of the biceps, which is closest to the shoulder joint, is included in the work. Exercises that force us to bring the arm bent at the elbow forward - accordingly load the lower part of the biceps closest to the elbow joint.

It is difficult to isolate the biceps using only body weight, so most of the exercises in biceps training will involve other muscles, such as the back. The main exercise for working out the biceps is pull-ups on

the bar in various variations. Under the biceps, deep in the shoulder muscles is a small but important muscle - the brachialis. It comes into play most strongly when you bend your arms at the elbow joint, and while your palms are facing each other, or facing down.

Biceps pull-ups

The biceps pull-up is a basic upper body exercise that involves raising and lowering the body using the arms while hanging on a horizontal bar. In order to emphasize the load on the biceps, there are several useful exercises that shift the bulk of the load on the biceps brachii.

Technique: see "Pull-ups on the horizontal bar". The technique differs depending on the exercise, but they are all based on pull-ups, which are the most effective biceps exercises in size and strength.

Recommendations: see "Pull-ups on the horizontal bar". The technique differs depending on the exercise. Required equipment is a horizontal bar.

1. Pull-ups in reverse grip with amplitude up to angle of 90°



2. Pull-ups to one hand



Note: the other hand is used to maintain balance.

3. Bending hands in reverse grip when hanging on the bar



Note: do it by flexing your arms, not pulling up on the crossbar.

4. Pull-ups on the handle with a torso turn





Note: turn your torso towards the arm you are pulling on.

5. Pull-ups on one hand with a reverse grip



Note: the non-target hand should be practically unusable and used as a hook for support.

6. Bending hands on the bar with a straight grip



7. Pull-ups with one arm while standing on the ground



Note: use a reverse grip. Focus on your biceps.

8. Side grip bicep pulls using bar handles



Note: place your elbows in such a way as to make the most of your biceps.

9. Pulling the body under a narrow grip



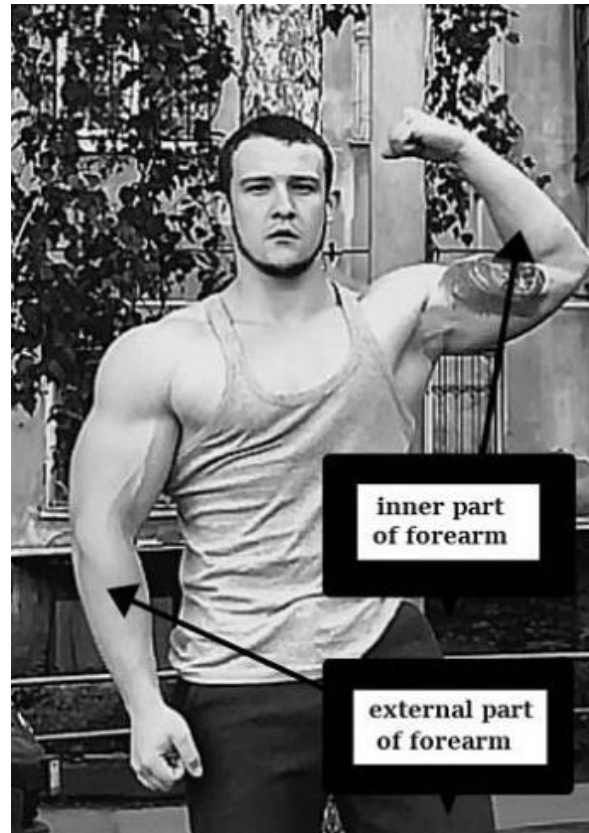
Recommendations: This exercise can be performed with both direct and reverse grip. Be sure to focus on the muscles of the arms, especially the biceps.

10. Accentuated arm flexion



Recommendations: the palm of the hand being worked should look up (supinated grip). Do not stand facing the athletic equipment - it is better to turn the body a little to the side. Your feet should be right under the bar. Pull your body towards the athletic equipment by curling the bicep of the target arm and slowly return it to starting position

Chapter 12. Forearms



The function of the forearms is rotation, supination, pronation, flexion and extension of the hands and fingers, as well as clenching the hand into a fist. The forearms are made up of many muscles. It makes no sense to describe them all. It would be much more logical to conditionally divide the forearm into two segments - the outer and inner surfaces. The inner surface is worked out when the forearms are flexed inward, with the palms facing up. We will work out the outer part with exercises that force the forearm, with the palm facing down, to unbend. Forearm and finger strength can be developed by training the grip strength of both the hands and fingers. This can be achieved by performing various hangs, exercising the arms with a wrist expander, or climbing a rope or handlebar.

There are two main types of forearm strengthening exercises: hanging on a bar and holding a weight. Later in this chapter, you can

find various forearm exercises based on these two basic exercises. Also compression of the wrist expander and push-ups and pull-ups on fingers will be useful.

Hanging on the crossbar

Hanging on a bar or grip is an excellent exercise for developing your forearm grip strength. This exercise is hanging on a bar, horizontal bar, stick or even a tree branch for maximum time. The exercise can be done with one or two hands. The thicker the crossbar, which you grab, the greater the load will fall on the forearms. You can also progress in this exercise by adding weights and thus making it harder for yourself. Weight hanging also develops forearm mass. To develop the muscle mass of the forearm, select such a burden with which you can stay in the hang for 20-40 seconds, and after successfully mastering this weight, increase it again until it is completely mastered. It is quite easy to progress in hangings, and in general there is no limit to perfection. By adding weights, or making this exercise harder, you will develop the strength, mass, and endurance of your forearms as well as your fingers.

Technique of execution: starting position is hanging on the bar with one or two hands.

Recommendation: try to squeeze the bar as much as possible to emphasize the load on the forearms.

Holding weights

Holding a weight is a great way to build strength in your forearms or fingers, depending on where you are holding the weight - by gripping it in your palm or holding it with your fingers using a pinch grip. An object that will be quite difficult to hold in your hand can act as a load. It can't be a bag with a comfortable handle or something that can hang from your arm, taking the weight off your forearms. Such a load can be, for example, a small barrel filled with nails or water, or in general any object that just strives to slip out of your hand.

Technique of execution: starting position is a narrow stance with the load, which is held by the forearm or fingers in the lowered hand.

Recommendations: try to squeeze the target arm with the weight as much as possible to emphasize the load on the forearms.

1. Hanging on the bar with a straight grip



2. Hanging on the bar with a reverse grip



3. Hanging on the handle with a side grip



4. Hanging on the bar on one hand



5. Hanging on a rope thrown over the crossbar



Note: a towel can be used instead of a rope.

6. Holding weights in the hands



7. Holding the weights with the fingers



8. Unbending of the hands on a low bar



Note: feet are on the ground, grasping the bar with a pronated grip, lean back a little. Straighten the hands, slightly pushing the body forward and return back.

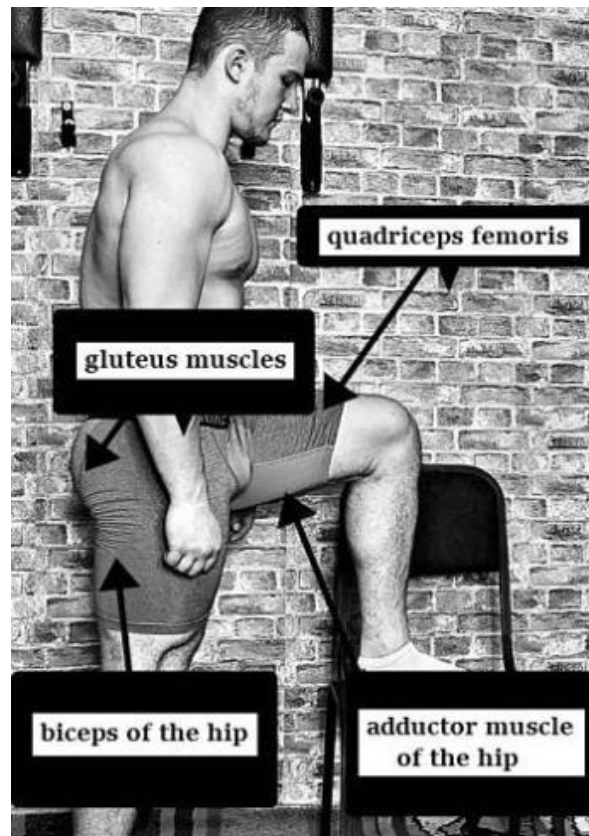
9. Compression of the wrist expander



10. Push-ups on fingers



Chapter 13. Legs



The legs are made up of many powerful muscles that can be perfectly developed even using only your own weight. Let's list the largest leg muscles and their functions:

1. The gluteus maximus muscle is responsible for extending and abducting the leg in the hip joint. It also participates in the extension of the trunk with motionless legs.
2. The quadriceps femoris is located on the front of the thigh and is responsible for extending the knee joint.
3. The long adductor muscle - participates in the adduction or moving of the thigh inward.
4. The biceps femoris is located on the back of the thigh and is responsible for extending the leg at the knee joint.

Most bodyweight leg exercises involve multiple leg muscles at the same time. The key exercises are squats, squats on one leg and lunges. We'll talk about the shin muscles later.

Squats

Squats are a natural basic movement that engages almost all of your leg muscles. The lower back receives a static load. This exercise has many different variations of execution and can be used both with body weight and with weights on the back or in the arms. Squats also can be done on one leg with support and without it.

Technique of execution: starting position is standing with feet hip-width apart, arms hanging freely.

1. Taking your pelvis back, bend your knees and sit down as low as possible.
2. Return to starting position

Recommendations: do not linger at extreme points and avoid swinging and inertia.

1. Deep squats on two legs



Note: go down as deep as possible.

2. Squats on two legs in a wide stance



Note: the more you spread your legs to the sides, the more you should turn the toes away from you.

3. Plie squats



4. Partial squats



Note: partial squats should be understood as squats in incomplete amplitude. It can be not only the upper part of the amplitude, but also the lower part.

5. Squats with using a chair



Note: at the bottom, practically sit on a chair.

6. Squats with heels off the floor



7. Bulgarian split squat



Note: perform the exercise alternately, first on one leg, then on the other leg.

8. Sissy squats



9. Sumo-style squats

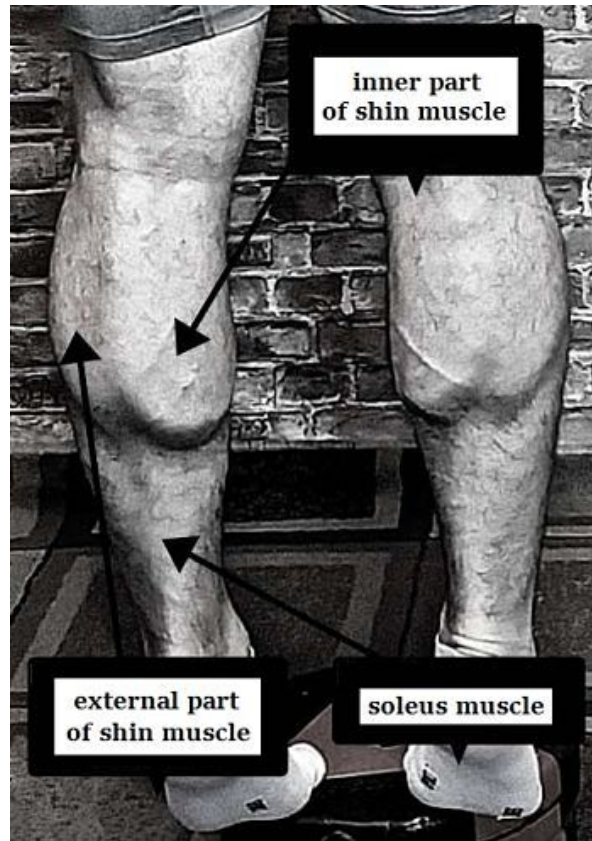


10. Squat on one leg "pistol"



Note: extend your non-target leg forward.

Chapter 14. Calf muscles



The main muscles of the lower leg are the gastrocnemius, soleus and anterior tibial muscles. The calf muscle is involved in raising the body to the toes, stabilizing the body when walking or running, and also takes part in the movement of the foot. The soleus muscle is involved in the flexion of the ankle. The tibialis anterior muscle extends and leads the foot. It is useful to perform sock raises from time to time, standing on a small platform, so that you can stretch the calf muscles as much as possible, dropping as low as possible, in an unusual range of motion for them. Depending on whether you turn the socks to the sides, or bring them together, the load, respectively, goes to the inner or outer region of the calf muscles, respectively. It is helpful to do a heel lift to develop the tibial muscle - this exercise will give you fullness in the front of your lower leg. The soleus

muscle will be more involved in the work if you perform the raises on the socks while sitting, but this exercise will require additional weight.

Calf raises

Calf Raises are a classic exercise for working out the calf muscles. It can be performed both simultaneously with two legs, and alternately with each leg. Additional weights will help to improve the impact of this exercise, and lifting toes from the platform will increase the amplitude of this exercise and allow you to work out the muscles even more intensely.

Technique of execution: starting position is narrow stance, hands down or holding weights.

1. Unbending the ankle, rise on your toes as high as possible.
2. Slowly return to the starting position.

Recommendations: Keep your back straight. Do not bend your legs at the knee joints and avoid swinging the body.

1. Rising on socks on two legs with the socks away from you



2. Rising on socks on two legs with the socks towards you



3. Rising on straight socks



4. Rising on socks from the platform



Note: get as low as possible.

5. One toe rise



6. One toe rise on the platform



7. Rising on socks in tilt position on the platform



8. Walking on toes



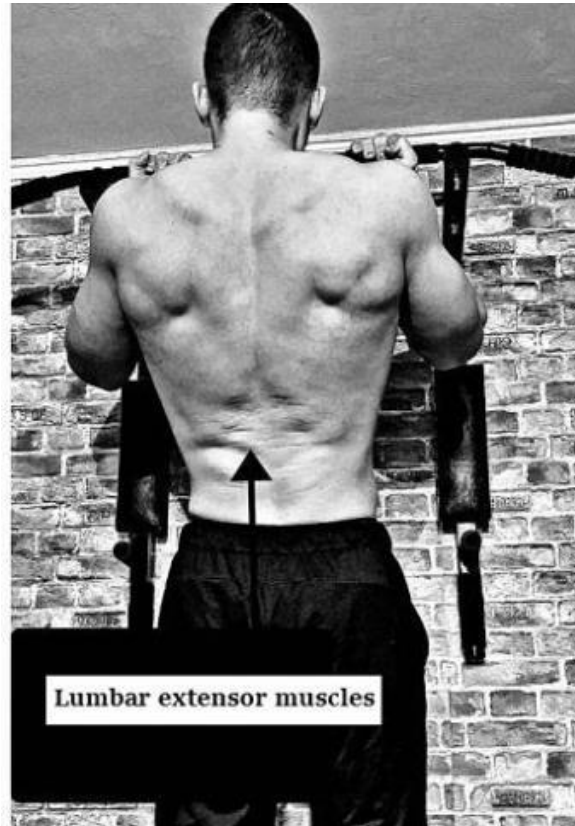
9. Rising on heels



10. Rising on socks from a sitting position



Chapter 15. Lower back muscles



The extensor muscles of the lower back help to keep the trunk upright and flex and unbend the spine. As a rule, the muscles of the lower back are easy enough to work using only your own weight. For this, there are many types of hyperextension and extension of the lower back from a lying position. Hyperextension can be made more difficult by holding the weight in front of you.

There are three basic exercises with variations that can be recommended for development of the extensor muscles: hyperextension, raising pelvis and raising straight arms in lying position.

Basic exercises for lumbar extensor muscles

Hyperextension exercise

Technique of execution of the hyperextension exercise: starting position - lying on the floor on the stomach with hands on the back of the head.

1. Lift your torso up by unbending your lower back.
2. Return to starting position.

Recommendations: it is advisable to fix the legs so that they do not come off the floor. The fulcrum is the front of the pelvis. The thighs also remain flat on the floor.

Raising the pelvis while lying on your back

Raising the pelvis, while lying on your back, is an exercise for developing, first of all, the flexibility of the spine. A more flexible lumbar spine will allow you to perform the same hyperextensions with greater amplitude, which will improve the impact of this exercise. In many other exercises where it is very important to keep the lower back arched, this will also give you an additional advantage.

Technique of execution: starting position - lying on the floor on your back, legs bent at the knees, feet on the floor. Hands should be extended along the body, palms on the floor.

1. Leaning on your shoulders, lift your pelvis as high as possible and bend in the lower back.
2. Return to starting position.

Recommendations: try to increase the amplitude of the exercise slightly to a reasonable limit with each repetition. Fixation at the top point is allowed.

Raising straight arms to the lying sides

Raising straight arms to the sides, while lying, is an exercise that works out the lower back perfectly. It represents the opening (rising)

of the hands alternately to the left and right sides with a simultaneous rotation of the body. It is performed from a lying position on a bench, but in the absence of a bench it can be performed on the floor.

Technique of execution: starting position - lying on a bench, the body is torn off the bench and held by the muscles of the lower back, arms are straightened to the sides.

- 1 . Perform a torso turn to the left and go back to starting position
2. Turn your torso to the right and go back to starting position

Recommendations: perform turns, concentrating on the tension in the muscles of the lower back. Fixation at the top points is allowed.

1. Hyperextension lying on the floor



2. Hyperextension from a support



3. Hyperextension with body rotation



4. “Superman”



Description: static exercise. Lock in position of outstretched arms and legs, keeping the maximum deflection (bending) in the lower back.

5. Hyperextensions from the "Romanian chair"



6. Raising the pelvis lying on your back



7. Raising the pelvis with shoulders lying on the platform



8. Raising the pelvis from the reverse plank



9. Raising straight arms to the side in lying position



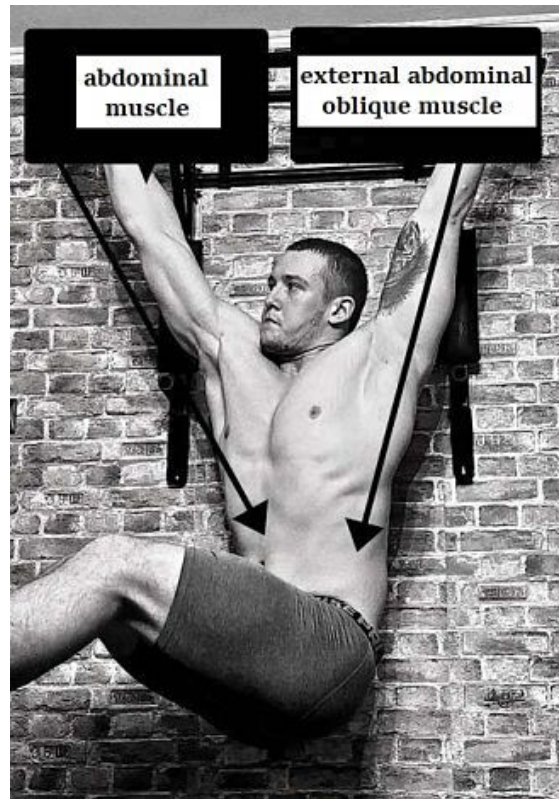
10. Forward bends



Technique of execution: starting position is standing on feet with shoulder-width apart, hands on the back of the head; muscles of the lower back are tense. Lean forward, keeping the lower back arch and go back to original position.

Recommendations: lower your torso until your back is parallel to the floor. If you are doing a resistance exercise, do not carry too much weight.

Chapter 16. Abdominal muscles



The abdominal muscles help the body to maintain a straight position, stabilize it, and are also responsible for turning and flexing the trunk and hips. To the abdominal muscles relate:

1. The rectus abdominis muscle (working on it and you will get your coveted cubes);
2. The external oblique muscles;
3. The internal oblique muscles and the transverse muscle.

The rectus abdominis muscle can be trained by performing various twisting of the body relative to the fixed legs (here, conditionally, the upper region of the rectus abdominis muscle is more involved), leg lifts, the relatively motionless trunk (here, conditionally, the lower region of the rectus abdominis muscle is involved) and twisting the trunk with simultaneous lifting the legs (the entire rectus abdominis muscle is involved). The internal and external oblique muscles of the

abdomen can be trained by performing the same movements, but turning or folding the legs or torso alternately, then to the right, then to the left. The transverse muscle can be trained with the "vacuum" exercise.

Crunches

Crunches are one of the most common exercises for the rectus abdominis muscle. This exercise is flexion of the trunk without lifting the lower back relative to the fixed legs. As a rule, crunches are performed in partial amplitude in order to maintain tension in the abdominal muscles for greater involvement in the exercise. There are many variations of this exercise that allow you to make this exercise more difficult or to use additional oblique abdominal muscles. We will analyze the technique of performing classic crunches on the floor.

Technique of execution: starting position - lying on your back, legs are bent at the knees, the lower back is firmly pressed to the floor, hands on the back of the head.

1. Lift your shoulder blades off the floor by contracting your abdominal muscles.
2. Sink back slightly, but do not touch the floor with your shoulders.

Recommendations: do not lift your lower back off the floor. While doing the crunches, do not just lift the body, but twist, straining the abdominal muscles as much as possible.

1. Crunches on the floor



2. Sideways crunches



Note: the exercise is performed alternately, first on one side, then on the other.

3. Crunches with hands in the lock on the chest



4. Crunches with hands on the floor



5. Crunches with body rotation



6. Side crunches



7. Cross crunches to the opposite leg



8. Crunches with straightened arms



9. Folding



Note: simultaneous lifting of the arms and legs while lying.

10. Crunches with weights in the raised up hands



Note: with each lift of the body, move up your hands.

Conclusion

To start a workout, you first need to define your goals. This could be muscle development for strength or endurance and flexibility. Then you need to create a program based on the exercises in the book. You can target the entire body or any specific muscle group. All recommendations for workouts were given at the beginning of the book. You must strictly follow them to get the results you want. Remember to take measurements before each session and keep a diary. I have given ten exercises for each muscle group with different difficulty levels. You should choose a few exercises for your program for a total of about 10-12, if your goal is harmonious development of the whole body, and do them at least 3 times a week. You can create two programs, one for the whole body and one for the upper or lower body or a specific muscle group and alternate them. With strict discipline, you will see the first results in building muscle in your body and increasing its strength and endurance in a few months.

About Author



Samuel Greenberg, writer, teacher, educator, researcher and practitioner with interests in astrology, NLP, psychology, human health by natural methods and other fields.

For questions and contacts, please use e-mail: samlost100@gmail.com

I will glad to answer your questions and use them in my upcoming books.